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Education and Marischal Museum: a century of teaching, learning and research

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Education and Marischal Museum: A century of teaching, learning and research

Neil Curtis

Synopsis

This paper explores the relationship between Marischal Museum in the University of Aberdeen and local schools, including teacher education, from the establishment of the Anthropological Museum to the present day. Beginning with an outline of the history of museums in the University prior to the establishment of the University's Anthropological Museum (now Marischal Museum) in 1907, the history of the schools service in the 20th century is discussed. This shows a change from school visits being tours of the museum displays to the development of curricula-focused object-handling workshops in the 1980s. The museum's place among other local resource providers and as a community service by the University is discussed. Contact with the School of Education (and its predecessors) also developed in the 1990s, including both educational research in the museum and the use of the museum in teacher education. It is argued that the place of the museum in a university with a school of education offers particular opportunities to integrate higher education with involvement with the local community and that the educational experience of the museum could be used to develop more effective learning in schools.

The history of museums in the University

Marischal Museum was established as the University of Aberdeen's Anthropological Museum in 1907. The history of museums and collecting in the University is much longer, with an inventory of King's College in 1542 listing objects, their donors and locations, rather in the manner of a museum catalogue. It was not until the later 18th century, however, that formal museums were created, with Marischal College's museum opening in 1786 (Knight, c.1840). The extent to which that museum was open to the public is unclear, though there is an account of a visit to the museum in Marischal College in 1833 by the Rev John Skinner. His notes (Skinner, 1825) indicate that there were display cases and a formal procedure for visiting. The building of extensions to Marischal College at the turn of the 20th century saw the amalgamation of a number of museums to form the University's Anthropological Museum in the college (Reid, 1912, p.iii). The museum was arranged to highlight the cultural products of the 'three races of mankind' and was clearly designed to support the education of students, particularly medics, for service in the colonies. The Anthropological Museum

(Southwood, 2003) continued to acquire archaeological, ethnographic and historical material through the 20th century and was renamed Marischal Museum in 1990. Until 1979, it was closely allied to the Anatomy Museum, while the souvenir guide produced for the 1906 opening (University of Aberdeen, 1906) shows that most other scientific disciplines also had museums, including Education. Some of these, such as Zoology and Geology, have survived, but sadly there is no trace of the Education museum.

The University's collections that have resulted from this long history are exceptionally significant, though this has often not been recognised. The National Audit of museums in Scotland (Scottish Museums Council, 2002) revealed that the University is one of the largest museum authorities in Scotland responsible for the sixth largest collection of material of national and international significance. The collections of Zoology (second largest in Scotland), non-Western ethnography (third largest) and Egyptology (second largest) are particularly notable. The importance of these collections within the North-east was at the expense of the museum collections belonging to local authorities which have therefore concentrated on local history and fine art. Despite this, only Marischal Museum regularly receives funding from the Funding Council in recognition of the benefit to the nation of these collections. All other costs are borne by the University with no funding from the local authorities. From 1907 to 1979 the Curator of the Anthropological Museum was an honorary post, held by two Professors of Anatomy for all but a few of those years. In 1979, the University appointed its first professional curator, Charles Hunt, with a remit to increase public access to the museum. As well as designing innovative and thought-provoking exhibitions (Curtis, 1995; Hunt, 1986), there was also a focus on developing the service to schools.

The schools service of Marischal Museum

By the early 20th century the Anthropological Museum was open free to the public, with about 20,000 visits per year in the 1920s and 1930s. Annual reports also regularly record that 'advantage was taken of the museum by students attending the Aberdeen Training Centre (the predecessor of the University's School of Education), several scientific

societies and by pupils from various schools in Aberdeen and the Counties of Aberdeen, Banff and Kincardine' (e.g., University of Aberdeen, 1924, p.4). Sadly, there are no records of the number of such visits before the 1950s or the form that they took. Before the mid-1980s, there was an annual average of fewer than 1,200 children (approximately one group per week during school term time), in which 'some of these groups were given classes in special subjects and were able to handle objects, but the great majority were simply exposed to the materials on display' (University of Aberdeen, 1980, p.5). Since records started being kept in the late 1980s, the number of 'general visits' has remained fairly static at approximately 500 per year, possibly corresponding with the number of such visits in previous years. In recent years, however, such visits are mainly by play-schemes and after-school clubs, with most school visits having a clear curriculum focus.

From the mid-1980s, object-handling workshops such as the 'Victorians' were organised, in which children discussed and handled objects from a diverse range of ages and places relating to project work taking place in class. There have also been shorter term activities, such as a mid-1980s exhibition and series of workshops 'Ani and Rori', focusing on two children in prehistoric Scotland, and a series of workshops leading to the creation of an exhibition 'Heids in the Clouds' by a group of secondary school pupils in 2006 organised by Aberdeen City Council's Storytelling Fellow. There was a significant growth in the number of visits from 1987 to 3,000-4,000 per year, partly due to the increased support for curriculum-linked museum visits encouraged by the 5-14 Curricular Guidelines (e.g., SOED, 1993), but building on well-established practice that highlighted skills-based learning and environmental studies (e.g., SCES, 1981; SED, 1965).

The 5-14 Guidelines underpin the teaching of children in Scotland, covering both primary schools and the first two years of secondary schooling. Although not a statutory national curriculum, they are used by government inspectors when inspecting schools. The Guidelines brought together the teaching of history and geography within 'Social Subjects' as part of 'Environmental Studies', emphasising that their implementation would 'require teachers and pupils to draw upon a substantial and wide-ranging variety of evidence from beyond the classroom' (SOED, 1993, p.104) and mentioning museums as among the resources for Environmental Studies. Nonetheless, the single reference to 'museums' was a disappointment to those involved in museum education and followed a complaint that the Review Group which developed Guidelines had not included a museum education

specialist (GEMS, 1992). Despite (or perhaps because of) this, the 1990s saw a series of publications by those responsible for museum and heritage education to demonstrate the curricular value of visits to museums and historic buildings (e.g., Durbin, Morris, & Wilkinson, 1990; Wood & Fry, 1995). Marischal Museum did likewise, producing an information pack in 1993 describing its object-handling workshops. Circulated to all schools in the then Grampian Region, this was followed by a booklet *Learning with Objects*, written by a teacher on secondment (Davidson, 1994). This includes a list of the strands in the Guidelines which appeared particularly relevant, alongside a selection of activities which could be used to develop skills of object investigation in the classroom, such as 'Looking at objects', 'Asking questions', 'Describing objects' and 'Classifying'.

In common with many other places, Aberdeen saw the development of a number of other schools resources from the late 1970s that focused on Environmental Studies. These included the establishment of the Aberdeen Urban Studies Centre (now the Aberdeen Environmental Education Centre) in 1978 (Paterson, 1996), Satrosphere (a science centre), the University's Natural History Centre, the re-opening of Aberdeen Maritime Museum and the 'Step into Medieval Aberdeen' project for schools (Stones, 1992). While there has never been formal co-ordination of these services or any coherence to their funding, members of staff have often worked together to organise in-service provision for teachers and make links between the services they offer. This includes workshops based on the novel *The Desperate Journey* (Fidler, 1997) set in the early 19th century which follows a family cleared from their home in Sutherland, via industrial Glasgow to Canada. While Marischal Museum offers a workshop (Curtis, Goolnik, & Hopkins, 1997) that uses material from rural and urban 19th century Scotland alongside objects used by settlers and native people in Canada, the Maritime Museum focuses on the journey across the Atlantic.

While the 5-14 Guidelines do not specify a particular programme of study for Environmental Studies, schools and local authorities have tried to establish such programmes that will ensure that all periods of study and geographical contexts will be covered during the primary school years. They also aim to incorporate progression from stage to stage. Many resource providers, such as museums and publishers, have seen the Guidelines as making it possible to provide resources for popular topics designed for children of particular ages. It is, however, striking that the introduction of the Guidelines did not have an immediate impact on the popularity of topics for museum visits.

The two most significant changes are the decline in visits by children in upper stages to study 18th and 19th century topics (such as 'Victorians', 'Georgians' and 'Jacobites') and the dramatic increase in the number of classes studying Ancient Egypt in the earlier stages, particularly P3-4. The former feature can largely be explained by the development of a suite of resources by the Aberdeen Environmental Education Centre, including town trails, object-handling workshop and a Victorian schoolroom. Similarly the absence of visits on topics chronologically between 'Vikings' and the 18th century is explained by the weakness of such collections in Marischal Museum, partially compensated by activities organised by the City Archaeological Unit and the Environmental Education Centre.

Following Blyth's argument (1988, p.32) that 'teaching young children through artefacts, family and oral history, is teaching history backwards, from the known present to the more distant past of the late nineteenth century', the decline in the number of classes visiting the museum for workshops on 'shape', 'old and new' and 'senses' is therefore particularly disappointing. By using a mixture of recent and older items from the collections, these workshops helped children to develop skills of investigation and historical understanding. Despite feedback from teachers demonstrating their effectiveness, the introduction of a standardised programme for Environmental Studies by Aberdeenshire Council (2001) identified Ancient Egypt as the topic most appropriate for P3 and P2/3 classes, leading to the large increase in visits on this theme.

While undoubtedly having the potential to be an exciting topic, I am concerned that its value in the teaching of history in the early years does little to help children to explore ideas of time, change and historical understanding. The theology of Ancient Egypt that lay behind the attitudes towards death and the creation of richly furnished tombs was remarkably complex and saw many changes over the thousands of years of Ancient Egyptian civilisation. Likewise, the use of hieroglyphics was much more complicated than the modern alphabet, with symbols representing ideas and words as well as individual syllables or letters. Neither of these aspects, nor many others, is easy to understand, with the result that it is difficult to believe that six- to seven-year-old children will be 'able to understand the importance of Pharaoh, his wealth and power' and 'the importance of temples, Gods and the afterlife' (Aberdeenshire Council, 2001, section 27).

A further reason for the increase in school visits from 1987 was my appointment with a remit that

included developing the schools service among other duties (Curtis, 1997a). There had been attempts to appoint an education officer from at least 1978, when a report by the University's Museums and Galleries Committee suggested that 'an approach should be made to the Regional Education Authority for the provision of a Schools' Museums Officer to work in collaboration with the University museums. Such an appointment, which has parallels elsewhere, would help to ease the burden on staff arising from work with the schools.' (University of Aberdeen, 1978, p.3) Such an approach by the new Curator in 1979 was inconclusive (University of Aberdeen, 1980), but continued to be made in subsequent years (e.g., University of Aberdeen, 1984, 1990). Only once was this successful, with a 40-day secondment in 1992-3. This period also saw the establishment of the museum's Young Archaeologists Club in 1994, with monthly meetings in the museum that have increasingly involved other museum staff and volunteers as leaders. The University's view of the value of the service to schools has been ambivalent. On the one hand, it has been an important aspect of the University's relationship with the regional community and has seen a substantial commitment of staff time. On the other hand, the service has usually not been considered as a core function of the museum and the development of the service has required external funding.

With the loss of one curatorial post in 1998, there has been a substantial drop in the number of classes, offset in 2002-2004 by the temporary appointment of a Curatorial Assistant as part of the LEMUR (Learning with Museum Resources) project. With substantial external funding, the project created an on-line virtual museum (www.abdn.ac.uk/virtualmuseum) which, while specifically targeted at higher education users, is now used by teachers and pupils in schools as well as student teachers in Aberdeen. A more dramatic decline after 2004 has been masked by the number of classes studying Ancient Egypt – a self-service activity using the museum displays with worksheets designed and provided by the museum. The University's ambivalence about the value of school visits to the museum has changed slightly in recent years, with the recognition of their value to student recruitment, particularly in terms of widening access among those traditionally not pursuing higher education. As a result, a small amount of additional funding was made available to develop links with secondary schools, leading to a dramatic increase in the number of visits from - and to - secondary schools. Without sustained funding this was not continued, though a new project in partnership with local government museums in the North-east may have a similar effect.

Educational research in Marischal Museum

Although the development of activities for schools had been informed by broader educational thinking, until the mid-1990s there had been no explicit research into the learning that was assumed to take place during visits to Marischal Museum. Indeed, it was noted by Durbin that 'the profession relies heavily upon theoretical work developed outside the museum sector, and very little research is done on the learning process in exhibitions and galleries by museum staff in this country' (Durbin, 1996, p.19). As a result, when the Scottish Museums Council established a Museum Education Initiative in the mid-1990s, a research project based in Marischal Museum was funded

as a study into the effectiveness of the use of objects as evidence to develop knowledge and understanding in a variety of key features within the 5-14 Environmental Studies Curriculum. Moreover it [had] a broader application, exploring the value of hands-on experience of objects and examining what factors contribute most successfully to effective learning. (Mitchell, 1995, p. iii).

With support from Shell UK Exploration and Production, who in 1993 had supported the production of the information pack and the creation of a study room and auditorium in the museum, a researcher was appointed. Initially, the research was to focus on a newly devised workshop on technology, but as there was negligible take-up of this workshop by schools it was decided instead to study the existing workshop relating to *The Desperate Journey*.

This research project (Curtis, 1996a; Curtis & Goolnik, 1995; Goolnik, 1994; Mitchell, 1995) was based on the observation of five classes taking part in workshops with follow-up interview of pupils in school a week later. The report highlighted the benefits of children handling objects as it offered 'the opportunity to touch, try out, examine, and draw an object made it memorable, and the activities of observing and recording were generally regarded as enjoyable and interesting. In engaging directly with an object, the pupils were able to absorb detail, and remember it later' (Goolnik, 1994, p. 18). Different approaches for different objects were also investigated, including the impact of an object being demonstrated to the whole class compared with one investigated without input from curator or teacher. An important feature of this study was its focus on a topic for which children were able to supply an imaginative context from their reading of historical fiction. As one of the classes studied had not read the story before their visit, comparisons were made between these different experiences. For example,

Even though, in retrospect, some of the pupils reported having enjoyed trying to guess what the snowshoe was, they appeared to an observer to be frustrated by their lack of knowledge, and their almost desperate search for identification precluded the exercise of source-handling strategies carried out by pupils not hindered in this way. (Goolnik, 1994, p.34)

Not only did this lack of contextual understanding limit understanding, it also affected the ability of children to describe objects as 'without appropriate knowledge of the context from which the Inuit carving came, pupil 14 could only recall minimal detail which lacked accuracy' (Goolnik, 1994, p.39). With its emphasis on the development of knowledge, understanding and skills, this research project clearly reflects the strands outlined in the 5-14 Guidelines for Environmental Studies, just as the publication of *Learning with Objects* emphasised curricular links and suggested activities that would prepare children for a visit by developing generic skills of object investigation. It did not investigate other approaches to learning, such as the role of play and creativity, or the selection of topics for historical study in school. It did, however, demonstrate the value of Marischal Museum's service to schools and suggested that it could 'be used as a model for other museums throughout Scotland' (Mitchell, 1995, p.20). It also highlighted the value of educational research within a museum setting, with Sydney Wood, then of Northern College, commenting that it provided

a beginning to what deserves to be further substantial research on a range of issues, and on a variety of approaches to include objects that pupils cannot be allowed to handle as well as those identified here. Language development issues, different teaching and learning strategies, the problem of the provision of contextual knowledge relevant to objects being studied, the use of knowledge structures of different types in which to embed object study, are but some of the issues deserving further study. (Wood, quoted in Mitchell, 1995, p.25)

Most immediately, this research inspired a further research project on young children learning in the museum (Curtis, 1996b, 1997b). This project, conducted for a MLitt degree in the University of Aberdeen, focused on four classes taking part in object-handling workshops on 'shape' and 'houses and homes' (Curtis, 1993). Like the previous research project, this was also based on observation and interviews with children and teachers. A range of activities was observed, including exploration, play and adult-directed activities, and all were

found to have a significant impact on the children's experiences. Children's understandings of objects and museums were also studied, including comparisons that the children made with school and other places as well as the impact of different objects. A common feature of comments by both children and adults was their perception of museums as special places which looked after objects from the past.

The most significant aspect to be identified was the tension between creativity and dialogue on the one hand and a didactic, knowledge-based approach on the other. While much writing on early education has emphasised the importance of play in children's learning (e.g., Vygotsky, 1978) it was interesting that neither teachers nor children considered play to be an appropriate activity in the museum. Instead, 'exploration' was more commonly preferred, which is in accord with the distinction between 'play' and 'exploration' offered by Hutt, Tyler, Hutt, and Christopherson (1989). They suggested that 'the implicit question "What does this *object* do?" we labelled 'exploration' while 'the implicit question "What can *I* do with this object?" we labelled 'play' (p.221). While it is possible that a museum visit could be followed by classroom activities that built on the knowledge developed during the visit by encouraging playful activities, this is unlikely, given the low status given to play in schools (e.g., Dignan, Morrison, & Watt, 1994; Tyler, 1991). Indeed, as observation revealed that the dominant adult behaviours during visit were organisational or didactic, even exploration was not as frequent as the rhetoric of museum or teachers might suggest. Without there being explicit opportunities for imagination and creativity, there is therefore a danger that a museum visit could become little more than data collection, emphasising the perception of museums as places of fact and certainty.

Teacher education and Marischal Museum

There has been contact between the museum and teacher education for many years, with visits by students from the Aberdeen Training Centre being recorded in the 1920s. There is also an intriguing record of three pistols having been lent to the Drama Department of Aberdeen College of Education in 1968 (University of Aberdeen, 1968).

From the early 1990s the museum has seen students of both primary and secondary education visiting the museum for workshops on the place of education in museums, mainly focusing on the teaching of history, though classes with a technological focus were also held in the early 1990s. The normal pattern of these visits has included a talk illustrated with relevant objects, a visit to the

museum displays to consider how they might be used with a school class, and practical activities resembling those undertaken during a school visit. Sometimes these visits have been associated with those to other resource providers in Aberdeen, such as the Maritime Museum or Environmental Education Centre, but it has been important to demonstrate that such visits are of broader value than merely demonstrating the local context and to set them within a broader context as the teaching career of many students will be elsewhere. While a reduction in contact time has lessened the time spent on such activities, the creation of the University's School of Education following the merger with Northern College, Aberdeen has led to other contacts and even more potential. For instance, third-year BEd students studying learning within an early years framework now take part in a workshop which uses the varied collection to discuss ideas of childhood. Rather than using 'childhood' as a universal category, such a historical/anthropological approach encourages students to be more self-critical and reflective. For example, the different ages and forms of initiation into adulthood can be seen in some of the objects in the collection, while the absence of material in the collection that is explicitly associated with the lives of children raises questions about both the nature of childhood and the biases in collecting practices. As well as the workshop, this visit also includes a consideration of the ways in which the museum's displays could be used by nursery schools, work which leads to web-mounted group presentations using images from the museum's on-line database (www.abdn.ac.uk/museumsearch).

An interesting recent development has been a contribution to the teaching of research methods for fourth-year BEd students making use of my experiences during the study of young children's learning in the museum (Curtis, 1996b). As well as offering an opportunity for students to consider the educational potential of museums, my role as both researcher and participant in the workshops is a relevant model for student teachers conducting research in the classroom, particularly highlighted during the interviewing of children after their visit. Wagner (1993, p.4) has argued for the acceptance of the role of participant researchers, whom he defines as 'those individuals who conduct research activities from within non-researcher roles that they occupy as fully as other non-researchers in the particular group, setting or organisation that they are investigating'. By using a small-scale research project, some of the issues that are relevant to undergraduate research projects can be explored, including such mundane factors as the difficulty of transcribing discussions by groups of children and the incorporation of children's drawings into the

analysis. To emphasise the importance of active selection and collection of evidence and the need to discuss these factors explicitly, I introduce the idea of 'capta' (from Latin 'capere': to take) in place of 'data' (from Latin 'dare': to give).

As well as involvement in initial teacher education, the museum has contributed to continuing professional development for teachers. Some sessions have been arranged as part of the CPD programme offered by local authorities, recently including work in collaboration with the University's Natural History Centre, Aberdeen Maritime Museum and Satrosphere to demonstrate the range of local Environmental Studies resources available for teachers. There have also been one-day seminars on wider issues, such as a meeting in 1995 which drew together people responsible for educational policy, class teaching and resource provision and which led to the publication of *Touching the Past: Archaeology 5-14* (Curtis & Curtis, 1996). As with many aspects of the museum's service to schools, links with the University's School of Education offer increased opportunities for development.

Creativity and communication

The extension of the use of museums beyond topics focusing on historical topics is particularly important. Previously, it has been difficult for new topics to be introduced that fall outwith those expected to be offered by an institution: in Marischal Museum this was particularly clearly seen by the abortive attempt to introduce topics with a technological focus ('materials' and 'energy') in the mid-1990s. Relatively poor links with teacher education and school management have restricted the exciting potential for work in the other social subjects, Personal & Social Education and Religious, Moral & Philosophical Education alongside the use of the museum in supporting literacy and numeracy. This is therefore a critical area for development, in which links with the School of Education may be very important. I hope that a closer partnership will enable the museum to contribute more within the changing school curriculum and will also be able to contribute to new thinking in these developments. As Hein (1995, 1998) has suggested, a greater emphasis on learner-centred education involving exploratory, creative and imaginative activities has major implications for museum education.

Currently, opportunities for extending the museum's work outwith the walls of Marischal Museum are being explored. This has included the installation of a display case in the interpretation centre in a local nature reserve and discussions with two schools to incorporate museum display cases as

part of rebuilding work. This will enable pupils to practise enterprise and curatorial skills as they select objects for display, write labels and welcome visitors to the display. A similar approach is being pursued with Aberdeen's 'Reading Bus' project in which display cases on board the bus are being considered. These will enable interesting activities focusing on the processes of exhibition creation that will develop literacy skills associated with both creativity and communication, rather than the traditional use of the museum as a source of evidence. Exhibitions will be able to deal with a wide variety of topics, sometimes using objects from the museum collections, but also many other items selected by children, as has already happened in a number of schools following museum visits by early years classes. In contrast the Aberdeenshire Environmental Studies guidelines (2001) only suggest the creation of a museum exhibition as a classroom activity in association with project work on Mary Queen of Scots: a topic for which it is extremely unlikely that they can have relevant objects. This is, however, not surprising given the weak links between these guidelines and local resources: there is no mention of Marischal Museum, the University's Natural History Centre or the Aberdeen Environmental Education Centre.

Conclusion

The use of the museum for University teaching and research lay behind the establishment of the Anthropological Museum in the early 20th century. However, the mid-20th century saw a decreasing academic interest in the study of museum objects that coincided with a greater emphasis being placed on the museum as a resource for the wider public. As this shift also coincided with the recognition of the educational value of museum visits by schools, the result was that the museum's links with local schools became very significant. The lack of funding by local authorities for this service has, however, resulted in a rather insecure service that has restricted its development and sustainability. The turn of the 21st century sees the museum re-establishing its role as a resource for higher education teaching and research in addition to its public role, with contributions to teaching in a wide range of disciplines including anthropology, gender studies, law, history, history of art, archaeology, visual culture and education. Much of this teaching, however, like the museum-based research and the creation of classroom museums outlined above, focuses on the museum as an institution, its users and its history as well as studies of particular groups of objects.

As Turner-Bisset has noted (2005, p. 31), 'most of the recent texts on teaching history in primary schools

have a section in using artefacts' and that 'because of their appeal to all the senses, they are particularly suitable for children in the early years'. While having a university museum clearly enables students to investigate this potential, there is plainly scope for a more thorough investigation of the use of the museum with older learners and for a much wider range of subjects. An emphasis on creativity in learning and the links between education and the museum in the University of Aberdeen offer particular potential to affect teaching in schools so that children and their teachers are able to develop a reflexive awareness of the roles of objects and museums instead of a simplistic view of objects as evidence for the past.

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